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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,338

11/14/2006

Masashi Miwa

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ALEXANDRIA, VA 22320-4850

EXAMINER

CHAU, LISA N

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

01/13/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,338	Applicant(s) MIWA ET AL.	
	Examiner Lisa Chau	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52-135 is/are pending in the application.
- 4a) Of the above claim(s) 54,55,62-102,104,106,108 and 110-135 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52, 53, 56-61, 103, 105, 107, and 109 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/25/07, 9/27/06, 4/9/08, 4/16/08, 3/17/09, 8/5/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election with traverse of Group I, Claims 52, 53, 56-61, 103, 105, 107, and 109 and Species B in the reply filed on 10/06/09 is acknowledged. The traversal is on the ground(s) that Group I do not include Species B of "an outer protective layer". In addition, Applicants argue that the subject matter of all claims or species is sufficiently related and a search and examination of the entire application could be made without serious burden.

This is not found persuasive because the restriction practice was based on "Unity of Invention", in which the groups have a common technical feature as disclosed by the Examiner in the Written Restriction Requirement sent on 9/10/09, and a different search of classes and subclasses are needed for each group and species. While the claims in Group I do not specifically use the term "outer protective layer", Examiner interprets the second layer of its protective layer to be the "outer protective layer" containing oxide.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 60 and 107 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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It is unclear which layer(s) the Applicants are referring to when having neodymium as its rare-earth element. Do both the magnet body and first layer of the protective layer have the same rare-earth element? For the purpose of evaluating prior art, the rare-earth element for the rare-earth magnet body is neodymium.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 52, 53, 56, 60, 61, 103, 107, and 109 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5876518 (“Hasegawa et al.”).

With regards to Claims 52, 60, and 107, Hasegawa et al. teaches a rare-earth magnet comprising a Nd-Fe-B magnet body containing Nd rare-earth element and a protective layer comprising a first layer (rare earth element-rich layer) covering the magnet body and containing a rare-earth element and a second layer (corrosion-resistant film layer) covering the first layer (rare earth element-rich layer) and containing substantially no rare-earth element (Col. 2: Lines 65 bridging to Col. 3: Lines 6, Col. 6: Lines 18-25, Col. 7: Lines 50-54, and Col. 8: Lines 4-8).

With regards to Claim 53 on the limitations on how the protective layer is formed, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-

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process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.”, (In re Thorpe, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product (In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

With regards to Claims 56 and 103, Hasegawa teaches its protective layer (rare earth element-rich layer and corrosion-resistant film) containing oxygen and an element derived from the magnet body (Col. 7: Lines 11-14, 50-54 and Col. 8: Lines 5-7).

With regards to Claims 61 and 109, Hasegawa et al. meets the total thickness limitation of its first and second layers as claimed (Col. 8: Lines 1-3 and Claim 3).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 57-59 and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5876518 (“Hasegawa et al.”) as applied to Claim 52 above, and further in view of US Pub. No. 20020007875 (“Yamamoto et al.”).

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With regards to Claims 57, 59, and 105, Hasegawa et al. teaches its magnet body containing a rare-earth element, neodymium, and a transition element other than the rare-earth element (Col. 6: Lines 16-54) and its second layer (corrosion-resistant film layer) containing the transition element and oxygen (Col. 6: Lines 16-25 and Col. 7: Lines 50-54).

Hasegawa et al. teaches its first layer (rare earth element-rich layer) containing the rare-earth element in an amount of 80 weight % or more, but is silent on the teaching of its first layer (rare earth element-rich layer) containing a transition element and oxygen.

However, Yamamoto et al. teaches a R-Fe-B magnet comprising a Nd-Fe-B magnet alloy and rare earth and transition metal oxide (Abstract and [0031]). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate transition metal oxide into Hasegawa et al.'s first layer (rare earth element-rich layer) in order to enhance magnetic properties (Abstract).

With regards to Claim 58, while Hasegawa et al. teaches the rare-earth element in the first layer (rare earth element-rich layer) are derived from the magnet body (Col. 8: Lines 4-11), it is silent on the teachings on the other elements in the protective layer being derived from the magnet body.

However, product-by-process claims are limited by and defined by the process and determination of patentability is based on the product itself. Regardless on how the elements in the protective layer are derived from, Hasegawa et al. in view of Yamamoto et al. have the same materials present for each layer as claimed.

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8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6326087 ("Nishiuchi et al.")

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Chau whose telephone number is (571)270-5496.

The examiner can normally be reached on Monday-Friday 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on (571) 272 - 1291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LC/

Lisa Chau

/Holly Rickman/

Primary Examiner, Art Unit 1794